NOAA, FMI and Roshydromet Tiksi Project Updates September 4, 2009

PROJECTS PLANNED FOR INSTALLATION IN SEPTEMBER - OCTOBER 2009

- (1) Radiation Sensors for the Baseline Surface Radiation Network Program
- (2) Climate Reference Network Site
- (3) Black Carbon Sampling
- (4) Surface Ozone Sampling
- (5) Surface Heat and Energy Balance Fluxes
- (6) Carbon Dioxide and Methane concentrations
- (7) Carbon Dioxide and Methane Fluxes
- (8) Green House Gas Sampler
- (9) Aerosol Size Distribution Monitoring
- (10) Aerosol Filter Sampling
- (11) Russian Radiation Sensors
- (12) Russian meteorological instrumentation
- (13) Total Ozone Measurements
- (14) Permafrost Measurements
- (15) Precipitation chemistry

The Total Commercial Value of the equipment in the 15 NOAA and FMI projects is approximately 11,700,000 RUB (257,000EUR) (\$335,000 USD) not including modernization of standard surface and upper air meteorological instrumentation.

SHIPPING

Instruments for Projects 1, 2, 4 and 5 were shipped from Boulder to Yakutsk on August 25th. Instruments for Project 6, 7 and 9 are in Helsinki awaiting shipment to St Petersburg Projects 3,8,10,11,12,13, 14, and 15 are in Tiksi.

NOAA has shipped equipment with the Russian shipper www.patix.ru which has a U.S. affiliate www.veloxshipping.com. The shipment is in New Jersey as of September 3. Patix expects to ship from Moscow to Yakutsk during the week of September 7. Roshydromet-Yakutsk has verified that it will handle shipping of NOAA equipment from Yakutsk to Tiksi. Flights are available 5 days/week. The planes are small, but most of the NOAA shipment is already separated in small packages.

FMI equipment is still in Helsinki. It is expected to ship on September 6 to St Petersburg. It is hoped it will be in Moscow by September 13-17. FMI has coordinated with the Polar Foundation on continuation of shipment to Tiksi after customs.

NOTE: Shipping: Russia to the US. NOAA (Boulder) has received the broken ozone sampler sent to Tiksi last year for repair.

CUSTOMS

NOAA Equipment will clear customs in Yakutsk Roshydromet-Yakutsk estimates 10-20 days. FMI Equipment will clear customs in St Petersburg.

DATES OF INSTALLATION IN TIKSI

The AARI team and the NOAA team have agreed upon the final schedule:

NOAA Team will arrive in Moscow (IAD-DME) on September 18 at 10:45 (Flight United 964).

NOAA and AARI team will fly Moscow-Yakutsk on September 20 (VKO – YKS) on Siberian Airlines Flight 4475 (Departing 19:40). We think this Siberian Air flight is operated by Yakutia Airlines. NOAA and AARI team will fly Yakutsk–Tiksi on September 21 (YKS – TKS) on Yakutia Air Flight 431 (Departing 13:40), NOAA and AARI team will fly Tiksi -Yakutsk on October 2 (TKS – YKS) on Yakutia Air Flight 272 (Departing 15:00). NOAA and AARI team will fly Yakutsk-Moscow on October 3 (YKS-VKO) on Siberian Air Flight 4477 (Departing 8:00 a.m.). NOAA and Roshydromet-Moscow and AARI will meet on October 5. NOAA and interested Roshydromet team members to visit U.S. Embassy Moscow on October 6. NOAA Team Departs Moscow on October 7 (DME–IAD) on United Flight 903 at 12:35.

NOTE: For booking flights between Tiksi and Yakutsk, we have had the helpful assistance of Mr. Mikhail Vasiliev from the Yakutia Airlines Marketing Department. (<u>Vasiliev.Mikhail@yakutia.aero</u>). He has made bookings for the NOAA team through email which will be purchased upon arrival in Moscow at VKO.

NOTE: NOAA Visa applications have been submitted after receipt of necessary letters from Roshydromet

NOTE: AARI Computer specialist will come to Tiksi on September 28.

NOTE: FMI and MGO are waiting to buy tickets until it is confirmed that their equipment will arrive. MGO has identified funding to support travel.

NOTE: NOAA team is developing an alternative work plan in the case where equipment does not arrive or is delayed.

NOTE: ALL TRAVELERS MUST SEND NECESSARY INFORMATION TO ROSHYDROMENT IMMEDIATELY TO APPLY FOR PERMISSIONS TO TRAVEL TO TIKSI. THIS INCLUDES RUSSIAN RESIDENTS.

Information is already sent for Uttal, Albee, Vasel, Matrosova.

INFRASTRUCTURE SUPPORT

The science teams need to interact closely with the Polar Foundation on infrastructure requirements for project installation. A priority order for projects and schedule is required.

The CH2MHill and Polar Foundation contract has been sent to Russia for signing. The science teams are filling out the following summary form to request support from Polar Foundation Construction Team. Note that Polar Foundation will also support Russian projects as requested by AARI or MGO. A teleconference call will be scheduled to discuss once all support forms are completed.

PROJECT NAME
INSTITUTION
CONTACT
EXPECTED DATE TO START
EXPECTED DATE TO COMPLETED
LOCATION (CAF, Weather Station, or Surrounding site with GPS coordinates)

PF SUPPORT REQUESTED

GROUND WORK REQUIRED
ELECTRICAL WORK.POWER REQUIRED
IT Support (computer, network connections, remote desk top etc)
CABLING REQUIRED
FURNITURE REQUIRED
MOVEMENT OF EQUIPMENT IN TIKSI REQUIRED

BUILDING PENETRATIONS OTHER (like towers etc) FUTURE WORK THAT CAN BE DELAYED TO NEXT YEAR PRIORITY

OPERATIONS

At time of installation a number of operational issues need to be addressed:

What future infrastructure requirements/improvements are needed?

Project operations plans need to be discussed with Tiksi staff

The documents providing permissions to operate must be matched carefully with actual instruments being installed. This Permissions Document is now approved.

A preliminary business plan for the Tiksi Observatory needs to be developed

CH2MHill, Polar Foundation and Roshydromet have to resolve issue of building ownership Schedule for transferring flask samples from the Tiksi to St. Petersburg and Boulder needs to be developed.

ADMINSTRATIVE DOCUMENTS

The Science Plan agreed upon during the May, 2009 meeting in Boulder, CO has not been signed and accepted.

U.S is still translating and making comments.

PERSONNEL SCHEDULED FOR TRAVEL

AARI

Alexander Makshtas Vasily Kustov Alexander Kuzmichov

MGO

Alexander Reshetnikov Victor Ivakhov

NOAA

Taneil Uttal Ludmila Matrosova Robert Albee Brian Vasel

FMI

Tuomas Laurila Mika Aurela Eija Asmi Irina Loutsenko